

## REMARKS

In this Amendment and Response, grammatical mistakes have been corrected and two phrases have been clarified in the Specification, and:

Claims 1 to 17 are pending as originally filed;

Claims 1, 2 and 6 have been amended; and

Claims 18 to 24 have been newly added.

## **A. Amendment of the Specification**

In paragraph 64, the words “or ‘external satellite modem’ or ‘second satellite modem’” were inserted in the parenthetical definition of “a second SCPC modem” as synonyms of the term “the ICE Modem”. This insertion collects in one place the two synonyms of the term “ICE Modem” in the context of a retrofit embodiment of the invention.

In paragraph 79, the phrase “and a Resource Manager (819)” was deleted, since, as described in paragraph 91, the Resource Manager does not have the status of one of three principal components of the ICE Server; the Resource Manager is part of the ICE Management Engine.

In paragraph 98 and 104, the phrase “ICE LES Unit” was amended to “ICE Channel Unit” to conform with usage of the term “ICE Channel Unit” in the remainder of the Specification. The former term was used in early drafts of the Specification and was superseded by the latter term; two instances of the former term were overlooked in the final draft of the Specification.

All other amendments of the Specification correct minor grammatical errors and punctuation.  
All amendments of the Specification are non-substantive and clarifying.

## **B. Amendment of the Claims**

Claims 1 and 2 have been amended as discussed in Part C below.

Claim 6 has been amended to substitute the adjective “external” for the adjective “second” modifying the noun “satellite modem”; this substitution better conforms dependent Claim 6 with the referent term, “external satellite modem”, in base Claims 1 and 2. The terms “external satellite modem”, “second satellite modem”, and “ICE Modem” are synonymous with reference to a retrofit embodiment of the invention.

### **C. Rejection under 35 U.S.C. § 112**

The Examiner rejected Claim 1 under 35 U.S.C. § 112, ¶ 1, for non-enablement, and

observes in paragraph 2 of the Office Action that:

“Since a single means claim covers every conceivable means for achieving the stated purpose, it is nonenabling for the scope of the claim because the specification discloses at most only those means known to the inventor.”

The Examiner also rejected Claim 1 under 35 U.S.C. § 112, ¶ 2, for indefiniteness, and observes in paragraph 4 of the Office Action that:

“... if the means allows for high data rates with a standard Inmarsat terminal, then clearly the rates are “possible” with Inmarsat terminal, on the other hand, if the rates are not possible, than [sic] the claim is not functional.”

Applicant has amended Claim 1 to add a limitation and to quantify throughput: the means is “diplexer/switch based”, and that the data rate is “approximately 32 kbps of throughput per 25 kHz of bandwidth” (the latter phrase replaces the phrase “higher data rates than possible with the standard Inmarsat-B mobile earth station”). The diplexer/switch elements and operation, and the combination of modulation and FEC used to obtain data rates of approximately 32 kbps of throughput per 25 kHz of bandwidth, are described in, inter alia, paragraphs 25, 27, 33, 66, and 72 of the Specification. The limitation of amended Claim 1 to a “diplexer/switch based means” traverses the 35 U.S.C. § 112, ¶ 1 rejection, and the replacement phrase specifying the enabled data rate traverses the 35 U.S.C. § 112, ¶ 2 rejection.

The Examiner rejected Claims 2-9 under 35 U.S.C. § 112, ¶ 2, for indefiniteness, and observes in paragraph 4 of the Office Action that in Claim 2:

“... the term “the two switches” lacks positive antecedent basis, also it is not clear where the embedded computer is embedded.”

Applicant has amended Claim 2 to delete the article “the” in the quoted phrase. The Specification describes only two switches, an entry switch and an exit switch, in connection with switching the transmit source between the MCU and the external satellite modem. The limitation, “on a DSP board interfaced with the external satellite modem and the MCU” has been inserted following the first occurrence of the term “embedded computer” in Claim 2, thereby identifying where the embedded computer is embedded. The amendments are supported by, inter alia,

paragraphs 29, 30, 31, 67, and 99 of the Specification.

The Examiner observed that Claims 2-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, ¶ 2, and to include all of the limitations of the base claim and any intervening claims. Claim 2, as amended, traverses the 35 U.S.C. § 112, ¶ 2 rejections and is a proper base claim; therefore, dependent Claims 3 to 9 also traverse the 35 U.S.C. § 112, ¶ 2 rejections.

**D. Correction of Drawings under 37 C.F.R. § 1.84(g)**

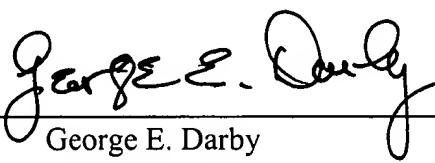
The Draftsperson has required correction of the left and top margins in Figures 1 to 8, 10 to 13, and 20. Corrected Drawings are enclosed.

**Conclusion**

Applicant respectfully submits that the rejections should be withdrawn in light of the Remarks and Amendments above. Applicant respectfully solicits a Notice of Allowance of all Claims. The Examiner is invited to contact Applicant's undersigned representative if there are any questions relating to the subject application.

Respectfully submitted,

Date: Jan. 5, 2004



---

George E. Darby  
Registration No. 44,053  
Telephone: (808) 626-1300  
Facsimile: (808) 626-1350

USPTO Customer Number 25668

Paradise Patent Services, Inc.  
P.O. Box 893010  
Mililani, HI 96789-3010